COAL MINING

AUGUST, 1950 "The Picture-Book of the Industry" VOLUME 27, No. 8

Lima 604 removes overburden on Swaney & Moats stripping operation near Uniontown.

...strip more coal at less cost per ton

IT will pay you to consult with Highway's mine equipment engineers before investing in new machinery.

Highway will help you secure maximum output at lowest cost . . . keep operations moving steadily without interruption . . . strip more—faster—with greater profit! That's why leading operators, like Swaney & Moats, Uniontown, rely on Highway for every type of mine equipment . . . from wire rope to Lima Shovels . . . from drill bits to powerful A-C tractors.

A-3249

Like all leading strip operators, Swaney & Moats rely on Jaeger Pumps to eliminate water problems.

Because they are rugged and tough, built to outproduce and outlast, Allis-Chalmers HD-19's step up stripping speed for Swaney & Moats.

Highway EQUIPMENT COMPANY

6465 Hamilton Ave.
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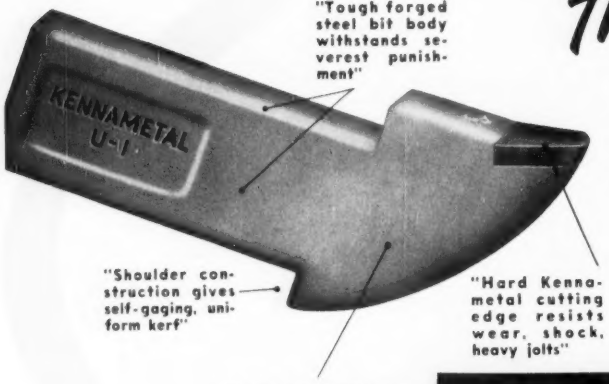
840 South 19th St.
Harrisburg, Pa.

Allis-Chalmers • Jaeger • Baker • Gar Wood
Hough • Master • Thor • Wayne Crane
General Motors Diesel Engines • Lima
Shovels, Cranes, Draglines • Mandt

Penn Valley Mining Co., Hunkers, Penna.

Gets Better Bit Performance

These Savings



$200 per month on reconditioning cost

20 per cent on man-hours at the face

A total of 6 cents per ton on overall cost

Kennametal Bits

"Give Best Cutting Service"

Says John Fordyce, Superintendent

John W. Fordyce follows the policy "better methods and materials make for higher and less costly production." One of the things he did to carry out the policy at Penn Valley Mining Co. was to equip all mining machines with Kennametal. He says, "We cut three more places per machine shift, and save about 20% on man-hours at the face."

A reduction from 10,000 bits to 50 bits per 5,000 tons of production has meant lower bit cost per ton. Bit grinding as a full time duty has been eliminated. All totaled, an estimated 6 cents per ton has been saved.

Sound construction backed by years of manufacturing—and the big "plus value" of the hard Kennametal cemented carbide cutting edge makes Kennametal your BEST choice. Only Kennametal gives you (1) Years of intensive research in matching together the properties of steel and carbide, (2) More years of quality product development and manufacturing.

There's a standard Kennametal bit specially-designed to meet your particular need. Contact the Kennametal representative near you, or write—Mining Div., Kennametal, Inc., Latrobe, Pa.

• Ordinary Cutting Conditions Style U-1

• Difficult Cutting Conditions Style U-1H

• Severest Cutting Conditions Style U-8

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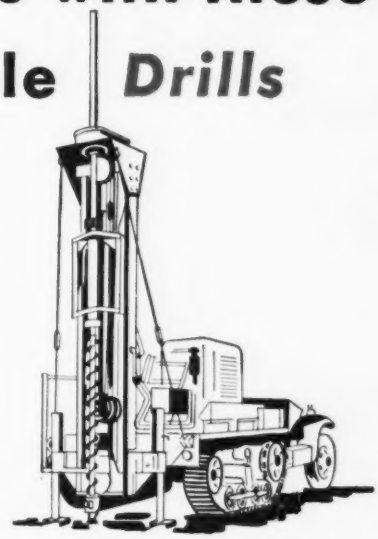
Lower your costs with these McCarthy shot-hole Drills



Vertical Drill Mounted on Half Track

● McCarthy Blast Hole Drills bore shale and rock formations to produce deeper and truer blast holes in less time with less effort.

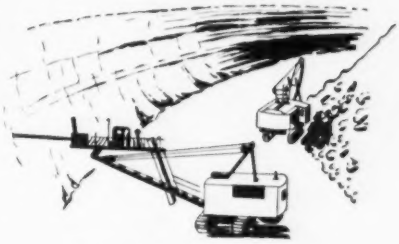
McCarthy Drills have heavier, more ruggedly built frames, with finger-tip controls, heavy-duty transmissions and alloy steel gears and shafts. Each unit is provided with an abundance of power, supplied from gasoline, diesel or electric motors.

Simplified designing permits increased mobility of both horizontal and vertical models . . . makes McCarthy the favorite in the field . . . the top performer of them all!

For high speed, high level drilling, there's the McCarthy Horizontal Drill for mobile mounting; there's a Self-Propelled, highly maneuverable unit for drilling blast holes close to the floor or bottom; and a compact, powerful Vertical Drill with a hydraulic tower that folds flat for travel.

Each of these McCarthy Drilling Units was developed for a specific job. Rigid tests prove conclusively that McCarthy Drills produce more footage at less cost than any other drills on the market.

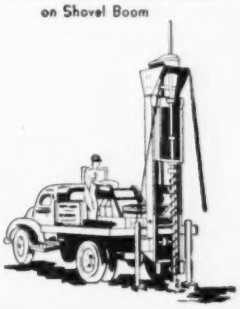
Make the Salem Tool Company headquarters for all your drilling needs. Write now for information about how McCarthy Drilling equipment can increase your production and lower your blast hole drilling costs.



Horizontal Blast Hole Drill Mounted on Shovel Boom

Truck Mounted Blast Hole Drill

Self-Propelled Blast Hole Drill



Vertical Blast Hole Drill

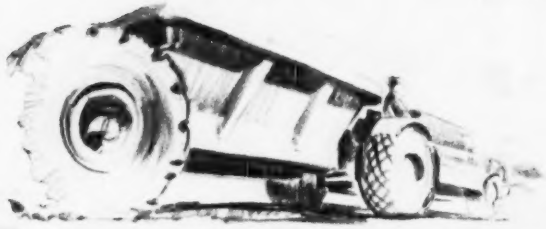
THE SALEM TOOL COMPANY

771 SOUTH ELLSWORTH AVENUE SALEM, OHIO, U. S. A.

Published monthly by Modern Mining Publishing Company. Publication Office—239 East Chicago St. Milwaukee, Wisconsin. Editorial & Executive Offices—5403 Clarion Blvd., Pittsburgh 27, Pa. P. F. JASIK, Publisher & Editor. WILLIS S. DRAKE, Sales Manager. Subscription Price: In the United States, $1.25 per year; all other countries, $2.00. Single copy, 20 cents. "Entered as second-class matter at the post office at Pittsburgh, Pennsylvania under the act of March 3, 1879. Application for re-entry applied for at the post office at Milwaukee, Wisconsin.

TAKE *the* STRIPPER'S

Diesel tractors and tractor tools, built by "Caterpillar" are the sure way of getting perfectly matched work-together earthmoving teams. These units, sold and serviced by Beckwith Machinery Company, provide the sure way of keeping in full and profitable operation.



This "Caterpillar" Diesel D 8, with its "Caterpillar" No. 80 Scraper, has proved an ideal team on stripping operations of this kind.

As evidence of "Caterpillar" satisfaction, take the Widnoon Company, successful coal strippers of Kittanning, Pa. Here is a "Caterpillar" Diesel D 8 of theirs and a No. 80 Scraper. They have owned from 4 to 8 of these outfits at one time, and always, according to their Mr. Kenneth Shaner, the result has been complete satisfaction.

You need not be satisfied with less.

The operators who have used "Caterpillars" longest appreciate them most.

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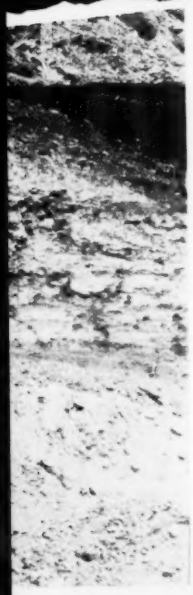

You get rid of overburden fast, sure and economically with the power and stamina of "Caterpillar" equipment.

That is true wherever coal is to be stripped today.

You start on the job knowing it is going to keep going right through to a profitable and satisfactory finish. Few strippers will ask for more than that.

But your "Caterpillar" Diesel equipment does give more — much more: it goes on from one job to another, from one stripping location to another, with but a minimum of maintenance cost and care on your part.

And if and when you do need parts or maintenance, it is right at hand with Beckwith Machinery Company. As a "Caterpillar" user you profit by Beckwith service —you gain in satisfaction, in time, and in actual dollars.

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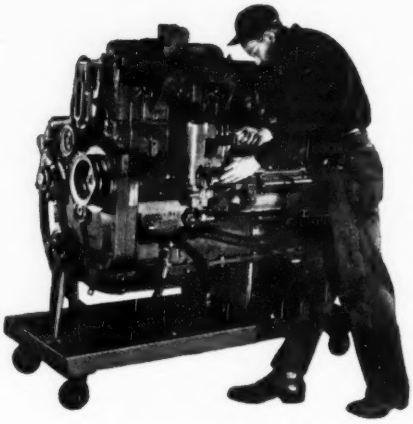

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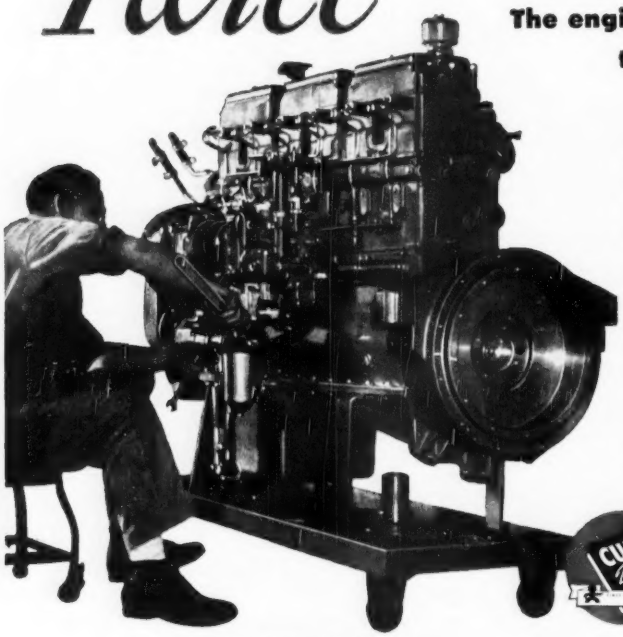

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COAL MINING

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storage battery locomotives are being used for gathering and main line haulage at the Powell Coal Company, Kittanning, Pennsylvania. They are 4-ton, single motor drive locomotives operating on 31-inch track gauge.

Greensburg locomotives are built in from 1½ to 15-ton sizes, either single or double motor drive, in both low and high types, 18 to 56½-inch track gauge.

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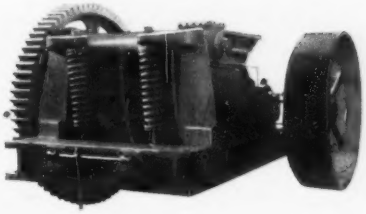
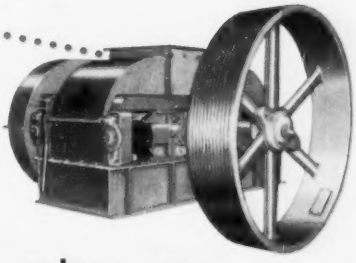
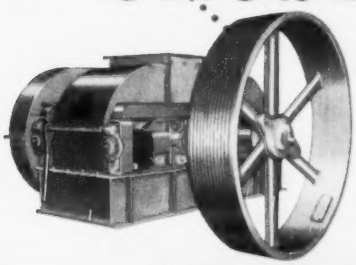
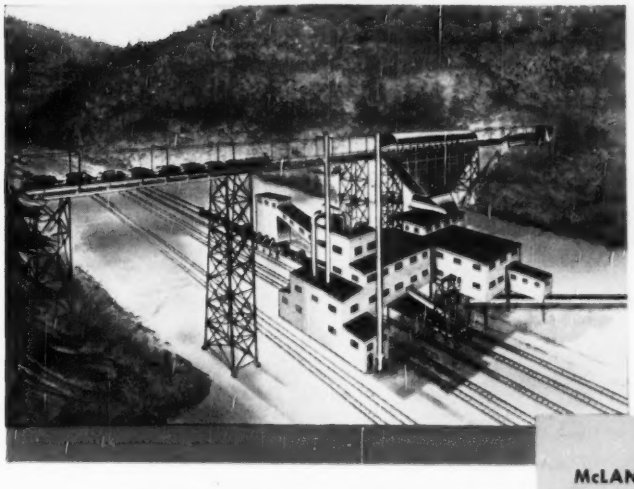






for the modern new LEATHERWOOD MINE



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The page you're looking at now...

Photo Courtesy of Oxford Paper Company

Yes, that's paper pulp you see, above, running through the "washer" in a modern paper mill. And in its long journey from wood pulp to printing press, *paper depends heavily on COAL.* In fact, there's an old saying that "It takes a pound of coal to make a pound of paper."

Americans use a tremendous amount of paper in their daily lives . . . more than 330 pounds per year for every man, woman and child. And nearly *three-fourths* of all the heat and power used in papermaking comes from coal!

To meet the needs of the pulp and paper mills for low-cost heat and power, the coal industry provides a dependable supply of specified grades of coal. It is doing the same for other customers—railroads, steel, public utilities, cement, chemicals, food packers—and the coal dealers who serve millions of homes, farms and stores.

America's progressive coal operators are ever on the alert to provide better and better products for ever greater utilization. And to that end they are investing huge sums in research, in mining equipment, and in preparation plants that not only keep coal competitive with other fuels but which also enable it often to surpass them!

And that's a fine thing for America's future, when you realize that coal is the nation's most abundant fuel resource . . . the one fuel whose reserves are almost limitless.*

● *To continue to serve the nation's industrial and domestic needs for fuel, and to play its vital part in our national defense requirements, the coal industry seeks only the opportunities provided by fair and free competition.*

* Ninety-five per cent of our total known reserves of fuel energy is represented in coal deposits.

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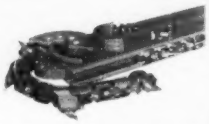
Patented concave design increases bit clearance, assures longer wear without increased power consumption. Made from special steel, rolled, with concave faces. Tests in hundreds of mines have proven these Bits last 15% to 20% longer. Bowdil makes the right size and shape bit for every mining condition, to fit all types of chain.

BOWDIL CUTTER BAR



Bowdil Cutter Bars are designed for extra strength and power saving. Rivet-free body, Z bar construction, wide wearing strips make it the sturdiest bar in mining. Bowdil Bars are standardized to fit all coal mining machines.

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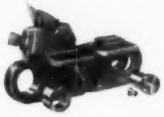

Lower your operating costs with Bowdil Fabri-Forged Chain. Rugged, easy to maintain, the drop-forged lug body stands up under heavy wear with breakage practically eliminated. A major improvement is the true-running radial track guide.

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Small, easy to handle . . . pays for itself many times over. Detachable jaws make it possible to replace claws without delay. The special construction pulls spikes without bending them.

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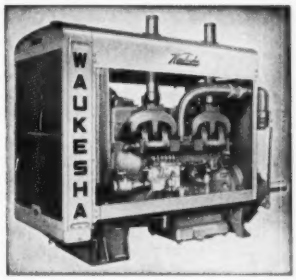

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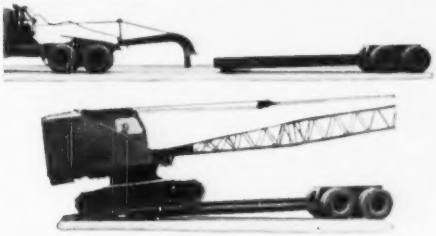

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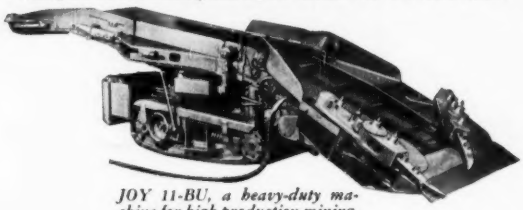
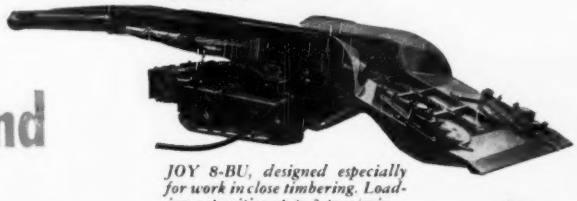
FOR PRODUCTION GAINS and COST REDUCTION

The JOY 11-BU loading into a JOY Shuttle Car in a thick seam.

There's an efficient JOY machine to save you time and money on every underground requirement



JOY 11-BU, a heavy-duty machine for high production mining. Loads up to 10 tons/min. in seams 60" or more.



JOY 8-BU, designed especially for work in close timbering. Loading capacities up to 3 tons/min.

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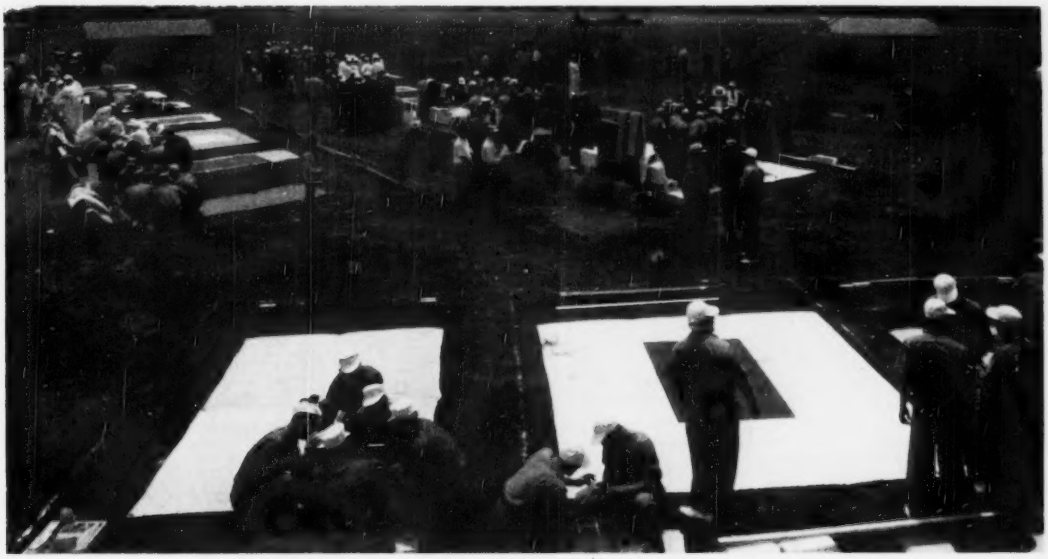


Overall view of the grounds on which the contest was held.

CENTRAL PENNSYLVANIA SAFETY ASSOCIATION'S FIRST AID CONTEST

The Central Pennsylvania Safety Association held its first First Aid and Mine Rescue Contest at Central City on Saturday, June 10. The meet was held in cooperation with the Pennsylvania Department of Mines, the United Mine Workers, The United States Bureau of Mines, and the Central Pennsylvania Coal Mine Operators.

The contest was under the direction of Wm. Thomas of the Pennsylvania Department of Mines. Chief Judge was Morgan Watkins, Inspector of Mines for the Coal Operators Casualty Company.

W. H. Ritter making the principal speech of the day.

George W. Snyder addressing the contestants.

Harry Sanford gave a brief talk.

Clyde H. Maize announcing the next event in the contest.

Morgan Watkins, Chief Judge of the contests.

Dennis J. Keenan kept the program running smoothly.

Winning team. Left to right: Emile E. Folmer, Captain; Richard Stigers, Joseph Simick, Pete Civic, Mathew Jeremias, Joseph Stupi, Lester Bateman.

Second place team. Left to right: John Boblick, Roland Johns, Joseph Csikos, John Killian, captain; Lewis Wargo, Pete Kovalsky, Lewis Gerosin.

Clyde H. Maize of the Pennsylvania Department of Mines lent his able assistance in keeping the meeting running smoothly. Dennis J. Keenan, President of the Association, kept the program functioning despite showers which seemed to come about every twenty minutes.

The principal talk of the day was given by Mr. W. H. Ritter, President of the Reitz Coal Company, which maintains the property on which this meet was held. Mr. Geo. W. Snyder, General Superintendent of the Reitz Coal Company also gave a brief talk. Other remarks were made by James Marks, President District No. 2 U.M.W.A. and Harry Sanford of the U. S. Bureau of Mines.

The first prize plaque was donated by the Mine Safety Appliances Company and presented by Mr. Vincent A. Stantoch, district representative. A loving cup by the National Coal Association was presented by Earl R. Maize, Directory of Safety Division for the N.C.A.

First place in the contest was won by the Beaverdale Number Four Mine team representing the Johnstown Coal & Coke Company which had a score of 100 points. Second place went to the team representing the Berwind-White Coal Company of Windber with a score of 99.933 points. Third place went to the team representing the Number 1 Mine of the Ebensburg Coal Company. The second place prize was decided after two extra problems were worked to decide a tie.

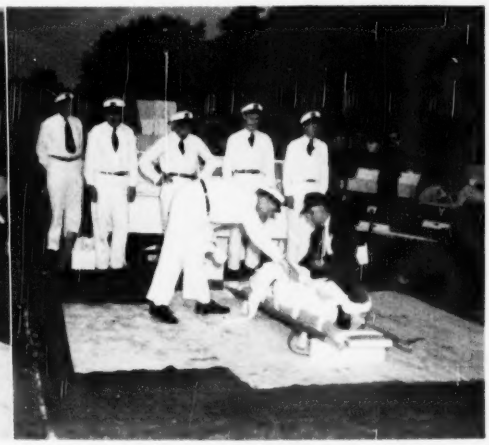
NEW EQUIPMENT

The new Bonded line of heavy duty flight conveyors is definitely in the low price field. Built in any length, and with flight sizes ranging from 12″ x 2″ up to 24″ x 8″. All welded steel truss construction with heavy one-piece cross section load carrying pan. Flights are hung from double chains. The chains are guided on both loaded and return levels to assure freedom of movement, and the top chain level is covered to reduce abrasion on the chain while load is carried. All chains have easily detachable links, making it easy to lengthen conveyor when necessary.

Heavy plate sprockets at each end are mounted on a through shaft, turning in precision sealed bearings. All lubrication and adjustment points are accessible from the outside. Choice of electric, gasoline, or diesel power; and choice of chain speeds. Variable speed control available.

High, flared sides allow full capacity to be carried without danger of spillage, up to angles of 45 degrees. Special features, such as bottom discharge gates and loading hoppers, are built to order. For prices and Bulletin 952, write to Bonded Scale & Machine Company, Columbus 7, Ohio, U.S.A.

Second place team working on one of the problems.



One of the judges inspecting work of one of the teams.

R. R. Bowie, President of the Association, addressing the banquet.

Executive Secretary of the Association, R. T. Laing, addressing the guests at the banquet.

Charles B. Baton was toastmaster at the banquet.

R. L. Ireland, President of the Ohio Coal Operators Association was the principal speaker at the banquet.

Mineral Producers Association Meets

The Annual Meeting of the Mineral Products Association of Western Pennsylvania, an association of coal strippers, met at the William Penn Hotel in Pittsburgh, Pennsylvania on Friday, June 2nd.

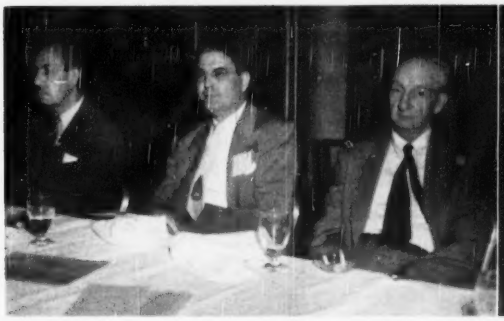
Directors reelected at the meeting were: W. C. Altwater, Pittsburgh & Shawmut Coal Company; W. B. Bannister, Pittsburgh Consolidation Coal Company; Charles B. Baton, of the Greensburg Connellsville Coal & Coke Company; H. W. Findley, West Freedom Mining Company; H. D. Ford, Ford & Gaskill; A. D. Grasso, Grasso Coal Mining Company and A. R. Davidson, Twin River Company.

At the afternoon session, which was open to the public, papers were presented on "Coal Reserves in Pennsylvania;" by James J. Dowd, United

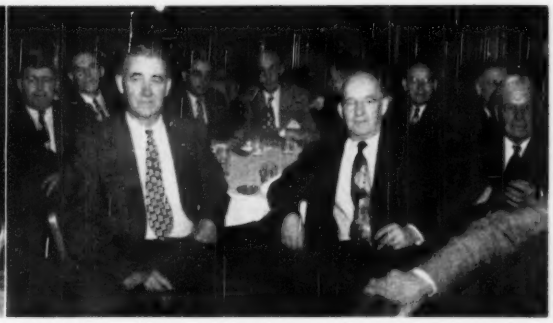
(Continued on page 22)

S. A. Bradley, Mellon Institute, Pittsburgh, pointing to figures he showed on screen while giving his paper "Recent Research on Mine Drainage".

James J. Dowd, Mining Engineer, U. S. Bureau of Mines, spoke about coal reserves in Pennsylvania.



Left to right: G. A. Shoemaker, President, Pittsburgh Coal Company, W. C. Altvater, Pittsburgh & Showmut Coal Company and John B. Brunot, President, Irwin Gas Coal Corporation.



District Mine Inspectors at the Annual Banquet. Left to right: E. Williamson, 5th district; C. E. Fisher, 10th district; Wm. J. Drill, 1st district; Dennis Keenan, 15th district; Olen S. E. Conrad, 9th district; Geo. S. Struble, 23rd district; George J. Steinheiser, 16th district; George S. McCaa, 29th district; George S. Baton, President, Baton Coal Company and Wm. Powers, 22nd district.

The Model 802 Lima Shovel stripping overburden.

STRIPPING SEWICKLEY SEAM COAL SOUTH OF UNIONTOWN, PENNSYLVANIA

In the area lying East and South of Pittsburgh, Pennsylvania, the Sewickley seam of coal lies from 35 to 70 feet above the Pittsburgh seam and is present in minable thickness in the higher hilltops as far south as Cross Creek, West Virginia.

In the vicinity of Uniontown, Pennsylvania, that seam of coal is known as the five-foot seam and lies under comparatively low cover. The coal is of high quality and makes an excellent industrial and domestic fuel. It is stripped quite extensively in that area.

The operation of Swaney & Moates is located about four miles south of Uniontown and can be seen off route 119. Overburden is shale and sandstone which is drilled with horizontal earth drill. Stripping is done with a Lima Model 802 shovel which is also used for loading out the coal. Water is pumped by a Yeager gasoline driven pump. The surface of stripped coal is cleaned with a H D 19 tractor. Backlevelling of the spoil banks is also done with the H D 19 tractor.

The HD19 tractor backleveling spoil bank.

A Jaeger pump in one of the pits. Note Sandrock overburden.

Left, George Rigg, Chairman of the Uniontown Branch of the Association and Ed Siemon, Chairman of the Nemacoiln Branch, lost all their friends at this meeting as no one would sit at the speakers table with them.

Second Seasonal Meeting of the Western Pennsylvania Coal Operators Golf Association

Left to right. Ed Van, Jeffrey Mfg. Co., Paul Weir, Consulting Mining Engineer and L. E. Young, Consulting Mining Engineer.

Left to right: Rolf Arentzen, Lee-Norse Co., H. J. Griffith, director personnel, Vesta Mines and W. E. Hess, General Superintendent, Vesta Mines.

Left: Ray Middleton, Vice President and Pittsburgh Branch Manager, Roberts & Schaefer Co., Don Dowlin, Crucible Fuel Co., and Bruce Van Wagner, Anaconda Wire & Cable Co.

J. R. Paulichek and Harold Sargent of the Interstate Engineers & Constructors and Fred O. Fowler of Thomas Brown, Inc.

Left to right: Howard Miller, Crucible Fuel Co., W. E. Schroeder and Reed Schroeder of the Schroeder Brothers Co.

Left to right: H. L. Lang, Industrial Electric Co., A. H. Love and Leo J. Schulte, Mosebach Electric Co.

Left to right: Bill Hart, safety director and Pete Latta, superintendent, Crucible Fuel Co., Harold Lusk, representative of the Wilmot Engineering Co.

Left to right: Elliott Williams, Hewitt Rubber Company of Pittsburgh, G. J. French, Farmers Engineering Company and Max Lambert, Hewitt Rubber Company.

Claude Furgeson and W. A. McBride of the Jefferson Coal & Coke Company and G. C. Young of the DuPont Powder Company.

Left: Harold Sager, Sager Coal Co., A. L. Brautegam, Owner Victoria Coal Co., Mr. Davis and O. C. Crump of the Brown-Fayro Co.

The second golf party of the 1950 season, held by the Bituminous Coal Operators Golf Association of Western Pennsylvania was held at the Nemacolin Country Club near Brownsville, Pennsylvania. Mr. Ed. Siemon, President of the Nemacolin Branch of that Association promised good weather, the weather was good and attendance by members and their guests surpassed the attendance of the first meeting of the season, held at the Uniontown Country Club. Following are pictures of some of the attendants who represent the highest branches of coal production, coal mine engineering and coal mine equipment manufacturing and selling.

Left to right: R J McGinnis, representative, Kennametal Inc., J W Thompson, suprintendant, National Mines Corp Morgantown, W Va. and Art Shannon, Morgantown office of the Jeffrey Manufacturing Co.

Wm. Groves, Jr was in charge of the exercises.

The Honorable Richard Mazie, Chief Department of Mines, Pennsylvania, addressing the graduates.

Joseph L. Walker, Assistant Supervisor, Pennsylvania State College, handing out diplomas.

SOUTHWEST PENNSYLVANIA COMBINED NIGHT SCHOOL GRADUATION EXERCISES

Night school graduation exercises in the southwest Pennsylvania coal mining area were held at Carmicheals, Pennsylvania. These exercises combined night mining classes from Fayette County, Greene County and Washington County. They included large mine operation of the H. C. Frick Coke Company, the Buckeye Coal Company, the Crucible Fuel Company, the Hillman Coal & Coke Company, the Mather Collieries and other smaller operations.

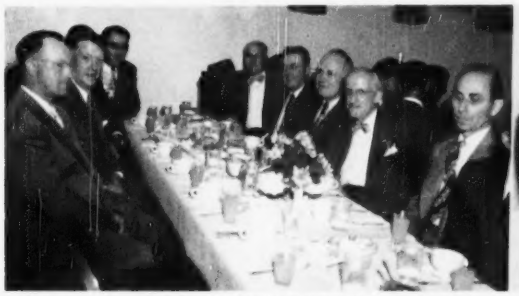
These combined exercises were under the direction of Wm Grove Jr., who is employed by the Crucible Fuel Company and who teaches night classes at Carmicheals under the supervision of the Pennsylvania State College.

These were, in all probability, the largest night school exercises in the soft coal industry in Pennsylvania this year and were attended by a large number of coal mine executives. The Honorable Richard Maize, Chief of the Department of Mines, Pennsylvania was present and congratulated the graduates for their ideals and effort to improve knowledge in the coal mining industry and for making the occupation of coal mining a better and safer occupation.

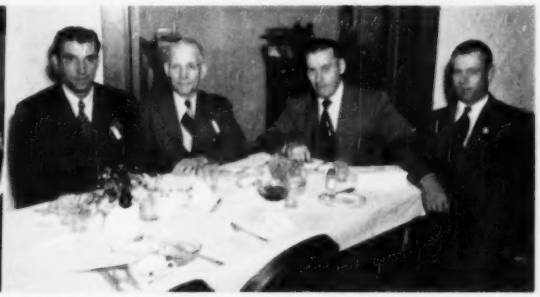
Mr. Allen Brooke, Manager Mines for the Mather Collieries was the principal speaker of the evening.

The principal speaker was Mr. Allen Brooke, Manager of Mines for the Mather Collieries, of Mather, Pennsylvania. Mr. Brooke read a paper about the advantages of learning to all.

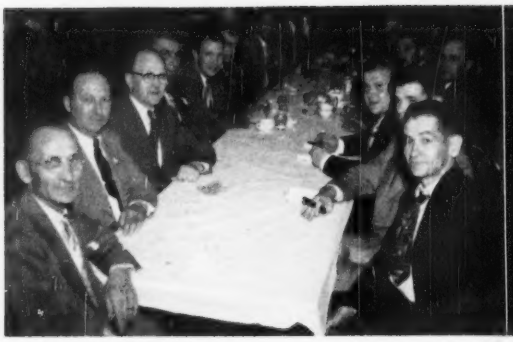
The diplomas to the graduating students were presented by Mr. Joseph L. Walker, Assistant Supervisor of The Pennsylvania State College who directs the night mining classes in the Western Pennsylvania area, and by Mr. Wm. Groves Jr. who instructs the Carmicheals class. Entertainment was furnished by Mr. David Moyers, Assistant Mine Foreman at the Vesta Number Five Mine of the Jones & Laughlin Steel Corporation who imitated a Scottish drunkard and a Jewish comedian.



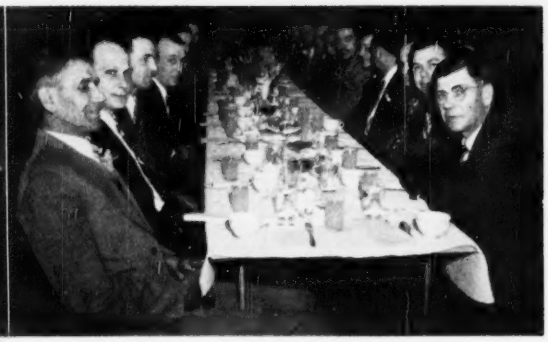
Left to right: left side, A. F. Headley, Wm. Groves, Alex Grant, Harry Swihart, M. Connor, T. C. Wilson, E. P. Skiles, H. J. Griffith, A. J. Grazier.



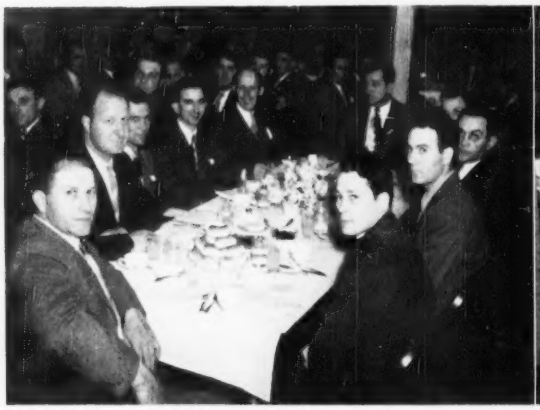
Bethlehem Collieries Group. Left to right: Stephen Kaminski, student; T. J. Jones, superintendent; Joseph J. Herron, Safety Engineer; Andrew Konicki.



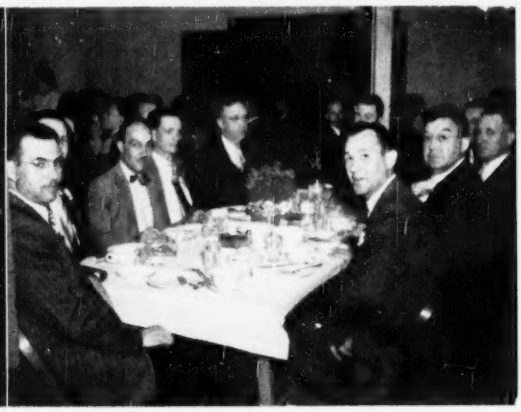
Left to right: E. K. Hickle, John E. Pringle of the Pennsylvania Dept. of Mines; W. R. Kuhns; Walter Cunningham; W. R. Kuhns, Jr.; Joseph Payesko, H. S. Grimm; James Seksay; John Stancin; Paul Ludosky; Stephen E. Ketchel; Walter Vicinelly; Paul Coltus.



Left to right: Joe Smalley, Walter Scorton, Elmer Chory, James Carrick, George A. Sweda, Jr., George Fisher, S. R. Trimbath, Steve Genshaw. Right side: front to back: John Lisko, Joseph Barnhart, Edward Bailey, Lewis Kifus, Lee Jettick, Frank Manor.



Robena Mine Group. Left to right: Steve S. Stofcheck, Alvin Emerson, Alfred R. Gray, Berley Maley, James Hribal, Bruno Misiah, Donald Woodward, August Pizub, Joseph Hatalla, Albert Dillion.



Mather Collieries Group. Left to right: Rudy Milovac, Earl Newman, Acie Underwood, Harold Martin, Guy Lewis, John Blosser, John Shimo, Arthur Taylor, Henry Broadwater, John J. Filo.

Hillman Coal & Coke Co. group. Left row, left to right: Emerson Robertson, Joseph Belsky, Charles Haubich, Andrew Paroda, John Halbayna, Dan Giovionella, Thomas King, Dave Evans and Thomas Lamb, Superintendent of the Emerald Mine.

Nemacolin group. Left row, left to right: Dale Swift, Al Kott, A. Morascini, J. S. Ellenberger, Nathan Kerr, Mike E. Demchak, Robert Groves. Right row, front to back: Vernon Skiles, Clarence R. Kooser, Paul Morris, Fred Gray, W. J. Nichols, John Cummings.

Sitting at Speakers' Table. Left to right: M. B. Girod, Supt. Robena Mine; Geo. S. Struble, Penna. State Mine Inspector; Arthur Waldman, Assist. Gen. Supt. H. C. Frick Coke Company; Thomas L. Mullan, Mgr. Industrial Relations; H. C. Frick Coke Company, Wm. A. Sica, Cost Clerk, Buckeye Coal Company.

Colored Group: left to right: Carroll Stith, Robena Mine; Cleophus H. Royster, Chartiers Mine; William Jordon, Poland Mine.

David Moyers, Assistant Mine foreman at the Number 5 Mine, Vesta Coal Company entertained the group by imitating a Scottish drunkard and Jewish Comedian.

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CONVERTED GOODMAN 460 LOADING MACHINE

Now! CONVERTED LOADING MACHINES

With ten years of cutting machine conversion experience as a background, the Lee-Norse Company, after exhaustive analysis, has pioneered another development in the modern trend toward trackless mining—TRACK-MOUNTED LOADING MACHINES CONVERTED TO RUBBER TIRE MOUNTINGS !

Save on your present investment and lower your production costs . . . take advantage of the desirable, mobile features of rubber-tired mining equipment . . . CONVERT YOUR LOADING MACHINES NOW !

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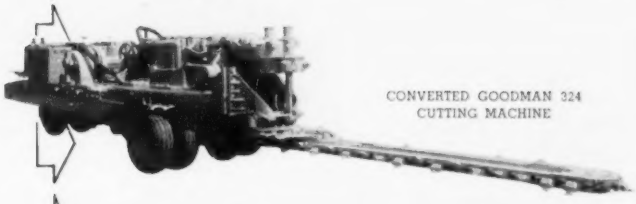

CONVERTED GOODMAN 324 CUTTING MACHINE

CONVERTED CUTTING MACHINES

The Lee-Norse Company specializes in converting track-mounted cutting machines and loaders to rubber tires . . . conversions that can result in modernization and years of additional service to your present track-mounted equipment. Rubber-tired mining equipment permits faster tramming at the working face and minimizes the wear-and-tear on your mine road beds. Profit by the advantages of trackless mining now ! IT'S SMART . . . TO CONVERT !

Our engineers will be pleased to furnish estimates and delivery dates on converting your track-mounted cutting machines and loaders. Write or telephone . . .

Lee-Norse Company
CHARLEROI, PA.

(Continued from page 15)

States Bureau of Mines: on "Proposed Legislation Affecting the Coal Industry;" by Walter F. Schulten, Pittsburgh Consolidation Coal Company: on Recent Researches on Acid Mine Drainage; by S. A. Bradley, Senior Fellow, Mellon Institute, Pittsburgh: on Extent and Character of Land Disturbed by Open-Pit Mining-Treatment" by Merritt J. Harding, Regional Forester, Pennsylvania Department of Forests and Waters Clarion, Pennsylvania.

After the afternoon meeting a reception and cocktail party was given the member and guests by the Highway Equipment Company of Pittsburgh. The Annual Dinner was held in the Urban Room. Greetings and introduction of the Toastmaster was by R. R. Bowie, President, Bowie Coal Company and President of the Mineral Producers Association. Toastmaster was Charles B. Baton, President, Greensburgh, Connellsville Coal & Coke Company. Speaker of the evening was R. L. Ireland, President Ohio Coal Association, Cleveland, Ohio, and his talk was titled COAL IS MY BUSINESS.

Wire fences will be easily spray-painted by use of what the inventor, Morris M. Benzuly of Chicago, calls a fence painting apparatus, patent 2,489,-445. It is a one-man affair that rides a temporary rail at the top of the fence and is pushed along the side. It works at a rapid rate, but more important are novel means for intercepting and collecting the spray passing through the fence to avoid waste.

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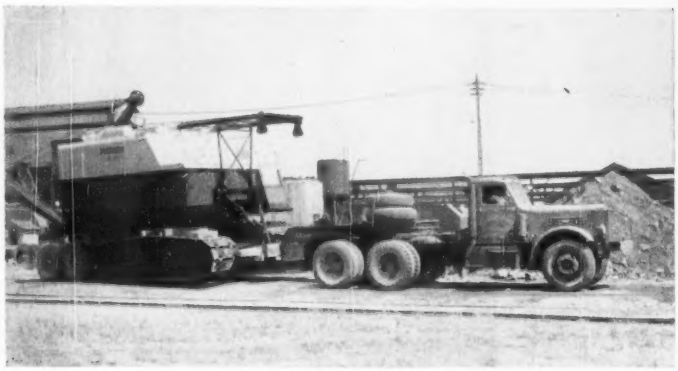

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Consistent power when you want it! Smooth performance season after season because it is precision engineered for the finest outboarding you've ever enjoyed.
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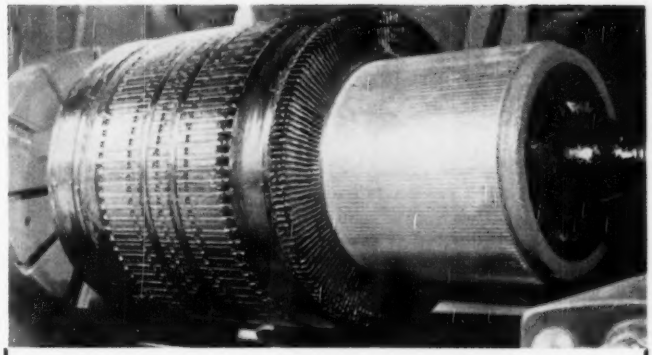

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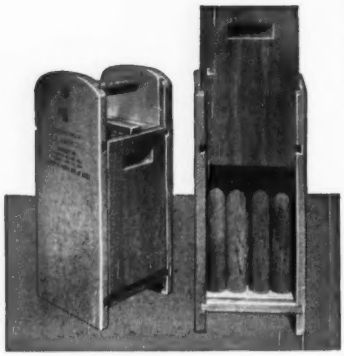
Sectional Tamping Poles

These poles are made of wood and are coupled together with removable wood pins held in place in recessed grooves by a rubber band and can be quickly connected and unconnected.

Couplers and head block are four inches in diameter and poles are 1½" in diameter.

Head Block	$3.10	Each
Coupler	$3.40	"
Poles 12 feet long	$2.40	"
Poles 14 feet long	$2.80	"
Poles 16 feet long	$3.20	"

WOOD TAMPING POLES FOR TAMPING EXPLOSIVE SHOTS: Poles are round made of hardwoods, lengths to 10 ft. Price per lineal ft. 1" dia. **6c**, 1⅛" dia. **9c**, 1¼" dia. **10c**, 1⅜" dia. **12c**, 1½" dia. **14c**, 1¾" dia. **20c**. Special diameters and lengths can be furnished.



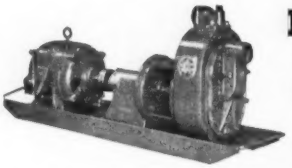
EXPLOSIVE BOXES: Made entirely of wood having no metal parts, tongue grooved and dovetailed construction with automatic lock using a rubber band for a spring, treated with paraffin to make moisture resistant. "Approved by the Pennsylvania Department of Mines." Sizes as listed based on 1¼" x 8" sticks.

No. 9 Powder Box	$2.05	Each
No. 12 Powder Box	$2.40	"
No. 16 Powder Box	$2.85	"
No. 20 Powder Box	$3.10	"
No. 25 Powder Box	$4.20	"
No. 36 Powder Box	$5.30	"
No. 50 Powder Box	$6.40	Each
No. 72 Powder Box	$7.50	"
No. 90 Powder Box	$8.40	"
No. 6 Cap Box (Sizes 2½" x 3" Inside)	$1.70	"
No. 8 Cap Box (Sizes 2" x 2½" x 8" Inside)	$1.70	"

The above boxes are rigid and non-conductive

J. V. Hammond Company **Spangler, Pennsylvania**

PLEASE SAY YOU SAW IT IN COAL MINING



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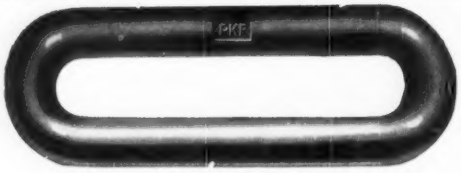

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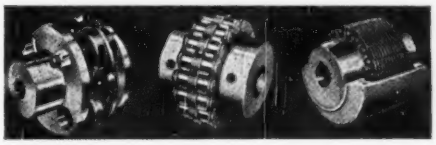

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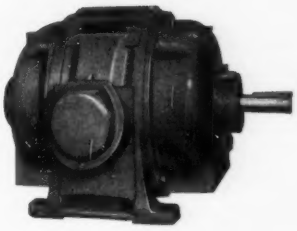

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9-W Bucyrus-Erie Electric Dragline; 200' boom, 8 yd. bucket, individually driven, regenerative drum sets. Machine like new. Pa. location.

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1201 Lima Shovel; with 32' boom, 22' stick, 3½ yd. dipper; and Cummins diesel engine.

Bucyrus-Erie 54-B Shovel; equipped with 45' boom, 33' stick, 2 yd. dipper and Buda diesel engine. Good condition. Pa. location.

Bucyrus-Erie 54-B Shovel; with 45' boom, 33' stick, 2 yd. dipper and Buda diesel engine; also, 80' drag boom, 2 Hendrix 3-cy. drag buckets, one B-E 2½ yd. bucket, fairleads and extra drum lagging for dragline operation. Crawlers: 21' long, 36" wide. Good condition. Pa. location.

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2—G.E. H-M 801 Locomotives, 48" Ga. 31" above Rail. Armor Plate Frame. 6 Ton.
2—825 G.E. Locomotives. Rebuilt. 44" Ga. 27" above Rail. 250 Volt. 5 Ton.
1—822 G.E. Locomotive, 44" Ga. 8 Ton.
1—G.E. H-M 803 Locomotive, 48" Ga. 32" above Rail. Armor Plate Frame. 6 Ton.

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2—Jeffrey 35-B Shortwall Machines. 250 V.
1—Jeffrey 29-C Arcwall Machine. 44" track gauge—250 Volt.
5—Goodman Standard 12AA Shortwall Machines.
3—Goodman 112 Universal Machines. 250 Volts.

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12,000 Gallon Oil Storage Tank.
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2—Joy 20" Chain Conveyors—330'
2—Joy 14" Conveyors. 200' Ea.
1—Jeffrey 12" Conveyor. 100'.
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It is one of the 476 patents of the week. The patent number is 2,495,306, and the recipient is Paul Zurcher, Ponca City, Okla. His paint contains methyl silicone resin, boric acid and a lead compound. The lead compound used, such as lead oxide, is capable of reacting with the boric acid at an elevated temperature to form a lead borate.

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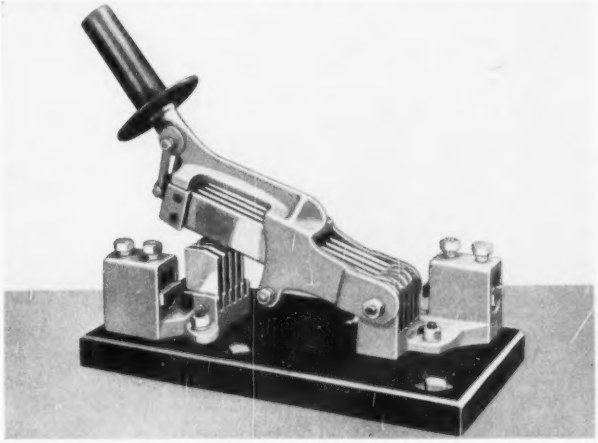

Mesco Heavy Duty Feeder Switches are designed for 750 to 1500 ampere applications. Handles equipped with "quick-break," "quick-make" springs. Available in wood or steel boxes, suitable for mounting in any position. Universal terminals accommodate feeder cables from 250,000 to 1,000,000 CM in size.

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Mesco Shock Absorber was developed for shuttle car use. But, with adjustments, can be used on other mine machinery. "Dead-ends" cables and allows slack for connecting cables to junction boxes or other power sources. Protects cables . . . limits splicing operations . . . saves time. Can be securely bolted to roof or chained to timbers or rail. Recommended for use on electrical, hydraulic or clutch-driven reels.

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Eccentric weight types. Several in stock from 2' x 4' to 2½' x 8'. Priced from $395.00. Heavy duty eccentric shaft types. A few on hand, in excellent condition. Sizes from 3' x 8' to 5' x 14'. One to 4 decks. Priced with cloth from $1,295.00.

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Double and single roll models. Types to produce ¾" stoker, and others to crush up to 8" resultant. Capacities from 15 to 500 tons per hour. Steel hoppers included at $395.00 and up.

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Complete with motor and drive.

15 to 35 ton per hour capacity	$ 350.00
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Single and double track platforms. Capacities 5 to 20 tons, $300 and up.

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Troughing idler conveyors picking tables. Any length, belt widths to 60". Prices from $395.00.

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All steel. Interchangeable with other well-known makes. Replaceable precision ball bearings. No bearing adjustments required. Easy to start and will run in cold weather. Rust-proof ball races; maintenance is negligible. Build your own conveyors: we have standard sections, head and tail pulleys, take-ups, drives, idlers, speed reducers, sheaves, belting, etc.

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14" belt	$18.50	24" belt	$21.00
16" belt	19.00	30" belt	22.00
18" belt	20.00	36" belt	23.00
42" belt	$24.00		

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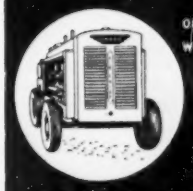

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3—Type A3G Goodman Duck bills.

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2—Jeffrey—250 v. DC.

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7—240 cfm Westinghouse 3 cyl. vert. 150 lb. pres. dir. con to 50 HP. AC Slip ring or DC Motors.

MOTOR GENERATOR SETS—250 V. D.C. Motors 220/440 v. or 2200 v.—3 ph., 60 cy.

No	KW	Make	RPM
3	250	Westinghouse	1200
1	200	Westinghouse	720
2	200	Westinghouse	1200
1	100	Westinghouse	700
1	100	General Electric	900
1	100	Westinghouse	600
1	100	General Electric	1800
1	100	Reliance	580
1	100	Delco	1200
2	90	Westinghouse	680
4	75	Westinghouse	720
1	75	Westinghouse	1200
1	60	Westinghouse	1200
1 NEW	50	General Electric	1800
3	40	Westinghouse	900
2	30	Westinghouse	720

125 V. DC M.G. Sets

1—100 kw. G.E. 125 v. 900 rpm. 220/440 v. 3 ph. 60 cy. AC Syn.

1—125 kw. G.E. 125 v. 1200 rpm. 220/440 v. 3 ph. 60 cy. AC.

1—75 kw. West. 125 v. 1200 rpm. 220/440 v. 3 ph. 60 cy.

D.C. Generators—250 v. D.C.

No	KW.	Make	Speed
1	250	West.	1200
1	175	G.E.	700
3 New	135	G.E.	1150
1	125	West.	560
1	125	Allis-Chal.	1150
1	110	West.	700
1	100	Allis-Chal.	1150
1	75	West.	750
1	40	G.E.	720

A.C. Generators—220/4000/440/220 v.

No	KW.	Make	Speed
1	125	West.	257
1	450	Elec. Machy	120

Pumps With A.C. or D.C. Motors

Qua.	Gpm.	Head	Kind	Make
3	1200	300	Cent.	Worthington
3	1100	323	Cent.	Worthington
3	1000	336	Cent.	Worthington

D.C. Motors—230 volts

No.	H.P.	Make	RPM	Type
1	175	G.E.	550	MD

SAVE OVER 50% ON NEW BLOWERS AND VENTILATING FANS AXIAL FLOW VENT. FANS

1—4000 cfm. 6x3" stat. pres. Sturtevant with 4/1.2 h.p., 1750/1150 rpm., 220/3/60 motor.

2—4000 cfm 3" stat. pres. Sturtevant 2 speed AC Motors.

2—5000 cfm 1.8 stat. pres. Sturtevant 220/440 v. AC Motors.

11—6000 cfm Sturtevant Bul. No. 512389, 3" stat. pres., 7 blade dir. con. 5/1.5 hp. 1765/1175 rpm., 220/440 v. AC West. TEFC Motors.

2—6000 cfm Sturtevant 1.65" stat. pres. 220/440 v. AC Motors.

1—7500 cfm Clarage 7½ hp., 220/440 v. 2 speed motor.

2—12000 cfm 3" stat. pres. Sturtevant with dir. con. 10/3 HP. 1775/1180 rpm., 220/440 v. TEFC Motors.

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COAL MINING

AUGUST, 1950

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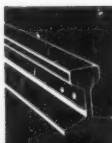

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Made To Withstand High Drilling Speed, Whip And Torsional Strain Of Electric Drills

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We will now be able to take care of your immediate needs as it is our intention to stock "Caterpillar" repair parts mostly for D-8, D-7 tractors, Motor Graders, Bulldozers and Power Control Units directly out of stock, although if you need anything in the way of repair parts for your equipment, call us and we will do our utmost to take care of your needs.

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